

## SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE) -- DOOR OPENING I.D.O.T. IDENTIFICATION DECALS SHALL BE MOUNTED TO FRONT OF 10' (3.0m) MAX. UTILITY DOOR **ENCLOSURE** ELECTRICAL SERVICE LOCK (ABOVE OR BELOW SEE PANEL DIAGRAM, ABOVE 13,75" (0,35m GROUND) CONDUIT BUSHINGS - SEE CABINET BASE, BELOW 1" CHAMFER, CONTINUOUS SEE ELECTRICAL FINISH GRADE-SQUARE FOUNDATION PANEL DIAGRAM TO TRAFFIC SIGNAL CONTROLLER 2" (50mm) GALV. CONDUIT (76 mm) GALV. CONDUIT **SERVICE INSTALLATION** -3/4" x 10' (20mm x 3.0m) COPPER CLAD GROUND ROD **GROUND MOUNT** (413 mm) 16.25" CABINET BASE 1.44" (37 mm) BOLT LOCATIONS

CABINET - BASE BOLT PATTERN (NOT TO SCALE)

## NOTES:

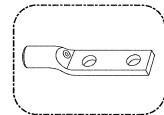
## GROUNDING SYSTEM

CONTRACT NO. 60B68 F.A. . SECTION COUNTY COOK 1602 STA. TO STA. FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT \*\* (0405-1 & 0506-2) RS-1

1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS, THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC,). GROUND ROD SHALL BE  $3/4^{\prime\prime}$  DIA.  $\times$  10'-0" (20mm  $\times$  3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT

2. THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.

- 3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS
- 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



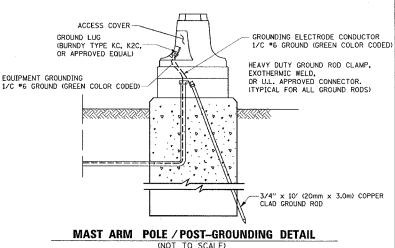
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP (BURNDY TYPE GRC OR APPROVED EUAL)

• ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED. • GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES

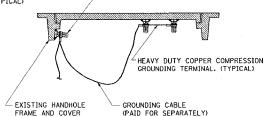
13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS SCALE: NONE DATE: 12/21/2006

TS05 REVISION DATE: 01/01/02

(2) 1/2"  $\times$  1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO FRAME AND TO COVER. (TYPICAL)



HANDHOLE COVER

**DETAIL "A"** 

HANDLE

DETAIL "B"

-U.L. LISTED

- SEE DETAIL "B"

CAST CORNER FRAME WEB

ANTI-CORROSION COMPOUND SHALL BE APPLIED ON ALL

BOLT/ CONNECTION ASSEMBLIES

-STAINLESS STEEL NUT AND 2 STAINLESS STEEL WASHERS

SEE DETAIL "A"

CABLE HOOKS REQUIRED, ALL

HANDHOLES

LIL LISTED GROWND. COMPRESSION CONNECTOR

UL LISTED GROUND COMPRESSION CONNECTOR

WITH STAINLESS STEEL NUT

(GREEN)

HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

ANDHOLE FRAME

GROUND CABLES TO CONTROLLER DOUBLE HANDHOLE

POST AS REQ'D.

**EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL** 

(NOT TO SCALE)